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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Magalie R. Salas
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: ***Ex Parte***
CC Docket No. 96-98
CC Docket No. 98-147

Dear Ms. Salas:

In this letter, Taqua Systems, Inc. ("Taqua") addresses issues in the above-captioned proceedings concerning collocation of CLEC equipment in ILEC central offices. Taqua was founded in 1998 to develop and provide alternatives to legacy telecommunications networks and equipment. Taqua is privately held with venture capital funding from Columbia Capital, Charles River Ventures, Bessemer Venture Partners, Soros Private Equity Partners, and Vulcan Ventures, among others. For the reasons discussed below, the Commission should permit collocation of equipment that "enables" interconnection or access to unbundled network elements ("UNEs"), determine that switching functions, among other functions that interact with ILEC networks, "enable" interconnection and access to UNEs, and that "multifunction" equipment that does not unreasonably occupy ILEC premises may be collocated.

Taqua's principal offering is its Open Compact Exchange ("OCX"). The OCX combines a number of functions in a physically compact piece of equipment including physical connection to ILEC facilities, multiplexing, termination of loops in line cards, and termination of DLC systems via T1 interfaces and the GR303 protocol. The OCX also provides many, but not all, of the features of a traditional end office/Class 5 switching system, and many functions not provided by Class 5 switching systems such as softswitch functionality, packet switching (later this year), and voice-over-ATM and voice-over-IP gateways. The OCX is the first commercially available product of its kind, offering all of these functions in highly integrated electronic components. The OCX offers dramatically improved performance and capabilities in a fraction of the space that would be required for stand-alone equipment providing these functions and for less than a quarter of the price or less. As such, the OCX is precisely the type of development sought to be achieved by the Telecommunications Act of 1996 in which Congress sought to "provide for a pro-competitive, de-regulatory national policy framework

designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies ... "[1] The OCX is currently deployed by CLECs in collocation space in Verizon and Qwest territory.

In evaluating issues on remand,[2] the Commission should determine, first, that a "necessary" function is one that "enables" interconnection or access to UNEs. Indisputably, in order to obtain interconnection or access to UNEs, CLECs must use equipment that enables interconnection or access to UNEs. In the words of the D.C. Circuit, such equipment is "indispensable"[3] for , or, alternatively "directly related to"[4] interconnection or access to UNEs. Therefore, equipment that enables interconnection or access to UNEs meets the statutory "necessary" test for collocation.

The Commission should also determine that "interconnection" to the ILEC network and "access" to UNEs involve more than merely providing the minimum capability of physical connecting with ILEC facilities. Instead, the Commission should determine that "interconnection" with the ILEC and "access" to UNEs includes interaction with the capabilities of the ILEC network. The Act defines network elements as including their "features, functions, and capabilities."[5] In order to access those functionalities, CLECs must employ equipment that is capable of interacting with those features, functions, and capabilities. Therefore, any equipment that enables CLECs to interact with the capabilities of network elements meets the statutory "necessary" test because it permits CLECs to access the features, functions, and capabilities of UNEs. Similarly, Section 251(c)(2) of the Act requires ILECs to offer interconnection "for the transmission and routing of telephone exchange service and exchange access."[6] (emphasis added). Therefore, equipment that provides a switching or routing function is encompassed within "interconnection," and may be collocated because it enables "interconnection" as defined in Section 251(c)(2). The multiplexing and DLC functions of the OCX, among other functions, enable CLECs to interact with the capabilities of UNEs, and its switching and routing functions permit interconnection as described under Section 251(c)(2).

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1 S. CONF. REP. No. 104-230, at 1 (1996). *See also Iowa Utils Bd. v. FCC*, 120 F.3d 753, 791 (8th Cir. 1997) (stating that Congress passed the 1996 Act, in part, "to erode the monopolistic nature of the telephone industry by obligating [ILECs] to facilitate the entry of competing companies into local telephone service").

2 *GTE Service Corp v. FCC*, 205 F.3d 416 (D.C. Cir. 2000) ("*GTE v. FCC*").

3 *GTE v. FCC*, 205 F.3d at 424.

4 *Id.*

5 47 U.S.C. Section 3(29).

6 47 U.S.C. Section 251(c)(2).

Therefore, the Commission should determine that these functions of the OCX, including switching, are necessary for interconnection and access to UNEs.

Further, even if the Commission determines that the switching capability of the OCX is not itself "necessary for interconnection or access to unbundled network elements," which would be incorrect for the reasons described above, the Commission should nonetheless permit collocation of the OCX as "multifunction" equipment. The Commission should determine that as long as equipment enables interconnection or access to UNEs it may be collocated even if it provides other functions as long as the equipment does not otherwise result in an unreasonable occupation of ILEC premises. In this connection, the OCX will not result in an unreasonable occupation of the ILEC central office. In fact, the OCX demonstrates in a compelling way that collocation of a wide range of contemporary telecommunications equipment is likely to substantially reduce the need for collocation space by CLECs. The OCX is characterized by an unprecedented degree of integration that dramatically reduces space, power, and building weight-bearing requirements. Stand alone traditional switching systems occupy 750 to 1,000 square feet of floor space, have special weight bearing requirements, and use 600 amps of power. The OCX uses only 35 amps of power, and occupies about 4 square feet of floor space even though it provides some switching capability and far more functionality in other respects than traditional switches. Therefore, the Commission should determine that the OCX may be collocated in ILEC central offices because it enables interconnection and access to UNEs and because it does not result in an unreasonable occupation of the ILEC central office. Taqua calls the Commission's attention to the fact that Section 251(c)(6) requires ILECs to provide collocation "on rates, terms and conditions that are just, reasonable, and nondiscriminatory ..."[7] Therefore, the Commission may require collocation of "multifunction" equipment that does not otherwise unreasonably occupy ILEC premises as a reasonable condition of the ILEC's obligation to offer collocation.

Taqua stresses that in no circumstances should the Commission categorically exclude Class 5 or packet switching capability from eligibility for collocation. As discussed, the OCX tightly integrates Class 5 switching capability, other capabilities, and enabling of access to UNEs. There is no economically or technically feasible way for Taqua to disaggregate these functions and maintain the dramatic cost and technical improvements represented by this equipment. One of the principal purposes of the Telecommunications Act of 1996 is "to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans."[8] A determination by the Commission that Class 5 capabilities are *per se* ineligible for collocation, even though tightly integrated with functions that enable interconnection and access to UNEs, would seriously threaten achievement of this purpose. To the extent the Commission chooses to impose some limits on collocation of Class 5

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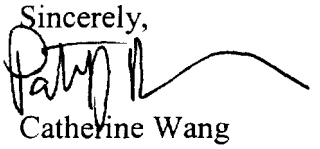
[7] 47 U.S.C. Section 251(c)(6).

[8] Sen. Rept. No. 104-230, 104th Cong. 1st Sess. (March 30, 1995) at pp. 1-2.

switching functions, it should simply exclude stand alone traditional Class 5 switches, not multifunction equipment such as the OCX that provides some, but not all, Class 5 functions along with other functions on an integrated basis.

In addition, the Commission should give no weight to ILEC arguments that CLECs should not be permitted to collocate multifunction equipment because this would permit them to install a "hub" in the ILEC central office. This argument has absolutely no relevance to the statutory standard for collocation. *i.e.* "necessary" for interconnection or access to UNEs. For all the reasons discussed above, multifunction equipment meets this standard, and the Commission may not restrict collocation of equipment that otherwise qualifies for collocation because ILECs do not want it collocated for competitive reasons unrelated to the statutory standard for collocation. Moreover, CLECs are not likely to want to install a "hub" in ILEC central offices because, if for no other reason, prices that ILECs charge for collocation space make this unattractive even if some multifunction equipment may be collocated.

Sincerely,



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Patrick J. Donovan
Counsel for Taqua Systems, Inc.

cc: Chairman Michael Powell
Commissioner Gloria Tristani
Commissioner Kathleen Abernathy
Commissioner Michael Copps
Commissioner Kevin Martin
Kyle Dixon
Bill Quirk
Deena Shetler
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